

## **STATEMENT OF JUSTIFICATION**

### **SPEX 2009-0030 / CMPT 2009-0009**

***REVISED DATED - JANUARY 15, 2010***

**IN SUPPORT OF THE APPLICATION FOR A SPECIAL EXCEPTION AND COMMISSION PERMIT  
TO PERMIT COMMUNITY WIRELESS STRUCTURES, LLC  
TO CONSTRUCT A TELECOMMUNICATIONS FACILITY AND ANCILLARY EQUIPMENT IN  
LOUDOUN COUNTY, VIRGINIA**

#### **EXIT 5: BROADLAND @ CLAIBORNE PKWY / DULLES GREENWAY**

CWS requests review and approval of a proposed one hundred fifty (150) foot monopole telecommunications facility (155' with lightning rod) to be located in a strand of trees between Route 267 and the eastbound ramp, more commonly known as Exit 5 Broadland. The proposed monopole will be surrounded by an eight (8) foot board on board over chain link security fence as shown on the Special Exception Plat. The visual impact from the communications facility will be minimal. The proposed monopole is compatible with development in the vicinity. Since the proposed location is adjacent to a highway, the structure will be viewed primarily by those traveling north and south on Route 267 (Dulles Greenway). The nearby thoroughfare is lined with utility and light poles, so the monopole blends with the other poles in the area. The proposed monopole is in the vicinity of power poles running along Route 267. The design of the proposed monopole blends with the nearby utility and light poles.

The purpose of the proposed telecommunications facility is to provide needed wireless communications coverage enhancements for the citizens, businesses and visitors of Loudoun County traveling through, working and living in the surrounding area for essential, non-essential and emergency communications.

The proposed telecommunications facility will include proposed antennas and related cables. Additionally, the proposed telecommunications facility will include equipment pads for T-Mobile and Clearwire with room for five (5) additional wireless providers. The proposed telecommunications facility will be located within a 6000 square foot board on board over chain link fenced compound. The total Special Exception Area, as indicated on the Special Exception Plat submitted with this application is 16,461 square feet. The proposed telecommunications facility will function as a base transmission station for wireless telecommunications networks. The proposed telecommunications facility is subject to the standards of Section 5-618. The proposed telecommunications facility will comply with the standards set forth in Section 5-618 as well as the general special exception standards of Section 6-1310. The proposed 150' monopole (155' with lightning rod and appurtenances) will accommodate T-Mobile at a proposed mounting height of 150' with twelve (12) panel antennas. Each panel antenna is 59" high, 11.9" wide and 6.3" deep. Clearwire will install at a proposed mounting height of 140' with three (3) panel antennas. Each panel antenna is 42" high, 12" wide and 4.5" deep. Additionally, Clearwire will install three (3) microwave dishes not to exceed 2' in diameter. There will be space for up to five (5) additional wireless providers on the proposed structure and inside of the proposed compound area.

In accordance with the requirements of the Zoning Ordinance of Loudoun County, VA., Community Wireless Structures, LLC ("CWS" or "Applicant") hereby submits this Statement of Justification in support of its request for a Special Exception and Commission Permit to allow for the construction of a one hundred fifty (150) foot monopole telecommunications facility (155' with lightning rod) and ancillary equipment on the property (the "Property") located near the Route 267 eastbound ramp of Exit 5. The Property is owned by the Toll Road Investors Partnership II, LP.

## NATURE OF REQUEST

CWS is a wireless infrastructure developer serving the wireless carriers in the Washington, D.C., metropolitan area, including Loudoun County. Section 4-100, 5-618(B)(2)(d) and Section 5-618(B)(3) of the Loudoun County Zoning Ordinance, effective June 16, 1993, as amended (the “Revised 1993 Ordinance”), and pursuant to Section 15.2-2232 of the Code of Virginia, as amended, CWS, as lessee, applies for a Special Exception to construct a one hundred fifty (150) foot (155’ with lightning rod) foot monopole communications facility with a sixty (60) foot by one hundred (100) foot compound enclosed with an eight (8) foot board on board over chain link fence on the Property located at Exit 5 along the Dulles Greenway. The Exit 5 facility area will be an approximately six thousand (6,000) square foot area on the property identified in the County land records as PIN: 234-37-8457 (the “Site”) near the intersection of Claiborne Parkway and the Dulles Greenway. The total Special Exception Area, as indicated on the Special Exception Plat submitted with this application is 16,461 square feet.

The proposed facilities will be in conformance with Section 5-618(B) of the Zoning Ordinance.

The setbacks from the property lines are approximately: 382.4 feet to the North East, 200.1 feet to the South West, 681.1 feet to the North West, and 946.9 feet to the South East. These setbacks exceed the requirements set forth by section 5-618(B)(3)(e).

## ZONING CLASSIFICATION OF PROPERTY

Collectively, the entire subject property is zoned AR-1, JLMA-20, PDH-3, PDH-4, PD-IP, PD-OP, PDTRC, R-1, R-16, TR-10 and Towns zoning districts. The zoning in the area of the parcel specific to the telecommunications facility is zoned PDH3. The parcels adjacent to this facility are zoned PDH3 (south, east & west of Site), PDH4 (north of the Site).

In accordance with Section 5-618(B)(2)(d), a Special Exception from the Board of Supervisors is required in to order to construct and operate “telecommunication facilities” within the right of way of a private toll road.

## REASON FOR REQUEST

The proposed facility is necessary to cover gaps in service in the vicinity of and around portions of Route 267 and the general area surrounding the Property. As more specifically shown, on the propagation maps submitted with this application, the wireless service providers using this communications facility need additional coverage in and around the immediate area, CWS respectfully requests that this proposal be approved.

Applicant considered the following alternate sites; for the reasons noted below, none of the alternate sites is preferable to the Property. There are three structures taller than 40 feet in height within a one mile radius of the site and they are listed below, however, none of these sites is preferable to the Property.

	<u>Site</u>	<u>Address</u>	<u>Zoning</u>
a.	Willow Creek Farm There were no existing structures 50 feet or taller on this property.	42920 Broadlands Blvd.	PDH3
b.	Hillside Elementary School There were no existing structures 50 feet or taller on this property.	43000 Ellzey Dr	PDH3
c.	Loudoun County Pub Schools	21000 Education Court	PDH3

#### Headquarters

Structure is taller than 40 feet, but Owner does not currently lease or license space to telecommunications carriers.

- d. Church of Jesus Christ of Latter Day Saints      21015 Claiborne Parkway      PDH4  
Structure is taller than 40 feet, but Owner does not currently lease or license space to telecommunications carriers.
- e. Our Savior's Way Evangelical Lutheran Church      43121 Waxpool Road      PDH3  
Structure is taller than 40 feet, CMPT/SPEX application process for T-Mobile USA to replace the church steeple for the placement of a telecommunications facility. The final height of the steeple will be 70 feet. Due to the nature of this build, the only carrier that can be accommodated is T-Mobile. This location will not satisfy the coverage requirements of the monopole proposed at Exit 5, Claiborne Parkway

The area in the vicinity of the site consists of predominately commercial and planned residential development uses. Applicant has located on the proposed Property which has sufficient space to accommodate a communications facility and the related ancillary proposed equipment compound. The proposed communications facility will be located in a strand of trees between Route 267 and the eastbound ramp, and will be screened by the existing trees and vegetation. The monopole will be surrounded by an eight (8) foot board on board over chain link security fence as shown on the Special Exception Plat. The visual impact from the communications facility will be minimal.

### CONSISTENCY WITH THE GOALS AND POLICIES OF THE COMPREHENSIVE PLAN

#### **Relationship to the Comprehensive Plan and the Zoning Ordinance**

The Comprehensive Plan. The Strategic Land Use Plan for Telecommunications Facilities was adopted as part of Loudoun County's Comprehensive Plan on November 6, 1996. The purpose of this policy document includes "...ensuring appropriate siting and design, and mitigating impacts of telecommunications facilities". The following is a discussion of the consistency of the proposed expanded monopole facilities with the goals and policies outlined in the 1991 General Plan.

#### Siting

The proposed telecommunications facility will have no impact on air quality, water quality, radiation exposure, light pollution, noise pollution, traffic congestion or circulation. The proposed telecommunications facility will be consistent with all applicable requirements, including building and fire code. The proposed telecommunications facility will not present safety or fire hazards. The proposed telecommunications facility is an unmanned facility that will not produce material noise, traffic, waste, or otherwise negatively impact the surrounding uses. The site will be visited approximately once per month by a technician for regular maintenance. There will be no new or additional glare or light generated by the proposed use.

The antennas emit no noise, light, or odors. The proposed telecommunications facility will have no discernable traffic impact. All carriers, and future carriers, co-locating on the monopole are licensed by the FCC, and each operates its equipment in full compliance with FCC rules and regulations.

#### Design

The attached Special Exception Plat shows the design of the communications facility and its relation to the existing structures on the Property. The communications facility will be one hundred fifty (150) foot in height (155' foot with lightning rod). It is placed between the eastbound access ramp and Route 267 in a stand of trees. Applicant proposes a sixty (60) foot by one hundred (100) foot fenced compound area. The proposed compound area will be surrounded by an eight (8) foot board on board over chain link security fence as shown on the Special Exception Plat. There will be additional utility equipment placed within the compound area to provide power and telecommunications services to the communications facility.

The Zoning Ordinance. Telecommunications monopoles shall be permissible subject to approval of a special exception and subject to the performance standards listed in Sections 5-618(B)(3) and 5-618(B)(4), 5-618(B)(2)(d); In accordance with Section 5-618(B)(2)(d), a Special Exception from the Board of Supervisors is required in to order to construct and operate “telecommunication facilities” within the right of way of a private toll road.

***CWS understands that the requested facility is subject to approval of a special exception and subject to the performance standards cited above.***

- Applicant has designed the proposed telecommunications facility to be at the lowest height possible while still providing coverage to the desired coverage area. Given the location within the existing treed area, the proposed telecommunications facility will create minimal visual impact as is illustrated in the photos simulations submitted as part of this application.
- The proposed monopole, panel antennas, dishes, and related equipment cabinets will all be within the size and height limitations specified in the Zoning Ordinance. The antennas will be painted to match the color of the pole. The equipment structures and cabinets will be finished in neutral, earth-tone, non-reflective materials, and will be completely screened by a board on board over chain like security fence and vegetative buffer. There will be no commercial advertising on the proposed Site.
- There will be no signals or lights or illumination on any antennas, unless required by state or federal authorities or the County.
- The proposed facility will be constructed to accommodate up to seven (7) wireless service providers.
- The Site is not located within a County-designated historic district.

CWS believes that the preceding responses demonstrate that the proposed facility is in conformance with the stated goals and policies of the Comprehensive Plan and that each of the above criteria for evaluating special uses has been met.

## **Conclusion**

The proposal described above is consistent with and furthers the policies and standards for the placement of commercial public telecommunications facilities in each of the applicable zoning districts as set forth in the Loudoun County Comprehensive Plan and Zoning Ordinance. The Applicant’s proposed facility will comply with all applicable development and building codes and the proposed uses will conform to all ordinances, regulations, adopted standards, and conditions. Accordingly, CWS respectfully requests approval of this Application for Special Exception.

## CONSIDERATIONS OF SECTION 5-618(B)(3) MONOPOLES

### GENERAL PERFORMANCE CRITERIA

#### EXIT 5: BROADLAND @ CLAIBORNE PKWY / DULLES GREENWAY

##### **GENERAL PERFORMANCE CRITERIA CONSIDERATIONS:**

**Section 5-618(b)(3): Monopoles, General Performance Criteria.** All telecommunications monopoles, whether permitted by right or permissible with the approval of a special exception application, shall be subject to the following criteria:

(a) The proposed telecommunications monopole shall be compatible with development in the vicinity with regards to the setting, color, lighting, topography, materials and architecture. In addition, the facility shall be located in the interior of the property and areas of existing vegetation, if applicable, shall be used to screen the facility.

The area in the vicinity of the site consists of predominately commercial and planned residential development uses. Applicant has located the Property which has sufficient space to place a communications facility and equipment compound. The communications facility will be located in a stand of trees between Route 267 and the eastbound ramp, so the equipment facility will be screened by existing trees. The monopole will be surrounded by an 8 foot board on board over chain link security fence as shown on the Special Exception Plat. The visual impact from the communications facility will be minimal. The proposed monopole is compatible with development in the vicinity. Since the proposed location is adjacent to a highway, the structure will be viewed primarily by those traveling north and south on Route 267 (Dulles Greenway). The nearby thoroughfare is lined with utility and light poles, so the monopole blends with the other poles in the area. The proposed monopole is in the vicinity of power poles running along Route 267. The design of the proposed monopole blends with the nearby utility and light poles.

(b) New telecommunications monopoles shall be designed to accommodate at least three (3) providers, unless:

- (i) Doing so would create an unnecessary visual impact on the surrounding area; or
- (ii) No additional need is anticipated for any other potential user in the vicinity; or
- (iii) There is some valid economic, technological, or physical justification as to why co-location is not possible.

**The applicant shall identify the conditions under which future co-location is not possible.**

The proposed 150' monopole (155' with lightning rod and appurtenances) will accommodate T-Mobile at a proposed mounting height of 150' with twelve (12) panel antennas. Each panel antenna is 59" high, 11.9" wide and 6.3" deep. Clearwire will install at a proposed mounting height of 140' with three (3) panel antennas. Each panel antenna is 42" high, 12" wide and 4.5" deep. Additionally, Clearwire will install three (3) microwave dishes not to exceed 2' in diameter.

A proposed 100' x 60' compound will be provided at the base of the monopole, to be surrounded by an eight (8) foot tall board on board over chain like fence. T-Mobile will install a 10' x 20' concrete pad within the enclosed compound, with three (3) equipment cabinets installed on the concrete pad. Each equipment cabinet will measure 63.5" tall by 31.25" wide by 37" deep. Clearwire will install a 7' x 7' concrete pad within the enclosed compound with two (2) equipment cabinets installed on the concrete pad.

The proposed facility will be designed to provide for at least five (5) additional wireless providers. The proposed facility will be unmanned and will operate around the clock, 365 days per year. Routine maintenance will occur once or twice per month, performed by a service technician driving a standard sized vehicle.

Applicant will market remaining mounting heights to all interested wireless providers. All interested wireless providers will install under the conditions set forth by the granting of the Special Exception and the documented drawings submitted as part of this application.

**(c) The height of such monopole, including antennas, shall not exceed 199 feet, as measured from the natural ground elevation.**

The proposed monopole will be 150' (155' with lightning rod and appurtenances).

**(d) Satellite and microwave dishes attached to monopoles shall not exceed two (2) feet in diameter.**

Clearwire will install at a mounting height of 140' with three (3) microwave dishes not to exceed 2' in diameter.

**(e) Except as provided in Section 5-618(B)(3)(o), and Section 5-618(B)(4)(d), telecommunications monopoles shall not be located any closer than one (1) foot for every five (5) feet in height to any property line. Structures and building may be constructed within the setback areas of the monopole, provided other zoning standards are met.**

The compound facility and fence are setback from the nearest property line by at least twenty eight feet (28') in conformance with the zoning ordinance requirements. To the North East 360'; to the South West 129', to the North West 681', and to the South East 1085'

**(f) The related unmanned structure(s) shall not contain more than 500 square feet of total gross floor area per telecommunications provider on each site. Structures shall not exceed 12 feet in height.**

Each equipment shelter will have no more than 500 square feet of gross floor area and will not exceed 12 feet in height.

T-Mobile will install a 10' x 20' concrete pad within the enclosed compound, with three (3) equipment cabinets installed on the concrete pad. Each equipment cabinet will measure 63.5" tall by 31.25" wide by 37" deep.

Clearwire will install a 7' x 7' concrete pad within the enclosed compound with two (2) equipment cabinets installed on the concrete pad. Each equipment cabinet will measure a maximum of 50" tall by 20" wide by 22" deep.

Space for additional five (5) wireless providers will be provided inside of proposed compound area.

**(g) Unless otherwise required by the Federal Communications Commission or the Federal Aviation Administration, monopoles shall blend with the background.**

The design of the proposed monopole blends with the nearby utility and light poles. The proposed monopole, panel antennas, dishes, and related equipment cabinets will all be within the size and height limitations specified in the ordinance. The antennas will be painted to match the color of the pole. The equipment structures and cabinets will be finished in neutral, earth-tone, non-reflective materials, and they will be completely screened by a fence and vegetative buffer. There will be no commercial advertising on the Site.

**(h) No signals or lights or illumination shall be permitted on the monopole, unless required by the Federal Communications Commission, the Federal Aviation Administration, State or Federal Authorities, or the County.**

Lighting is not required by the Federal Communication Commission (FCC), the Federal Aviation Administration (FAA), State or Federal authorities, or the County. No signals, lights, or illumination shall be located on the existing structure.

**(i) No commercial advertising or signs shall be allowed on a monopole.**

No commercial advertising or signs shall be located on the existing monopole.

**(j) A commission permit shall be required.**

A commission permit has been submitted to be processed concurrently with this Special Exception Application.

**(k) No monopole shall be located within a County designated historic district.**

According to the Section 106 report, dated August 23, 2009, and attached as part of this submittal, no properties are listed in the historic district. Additionally, no properties will be affected by the proposed installation.

**(l) No monopole shall be located within a PD-H or PD-RV zoning district except as provided in Section 5-618(B)(1)(a) and Section 5-618(B)(2)(d).**

The subject parcel is multi-zoned, the portion of the subject parcel in the vicinity of the proposed site is zoned PDH3. In accordance with Section 5-618(B)(2)(d), a Special Exception from the Board of Supervisors is required in to order to construct and operate "telecommunication facilities" within the right of way of a private toll road.

**(m) All unused equipment and facilities from a commercial public telecommunications site shall be removed within 90 days of cessation of commercial public telecommunication use and shall be restored as closely as possible to its original location.**

Applicant will remove the monopole and equipment and restore the site as closely as possible to its original condition within 90 days of cessation of its use as a telecommunications facility.

**(n) Applicants for any public telecommunications facility shall demonstrate that they have complied with applicable regulations of the FCC and FAA. A finding from the FAA that the proposed facility is not a hazard or obstruction to aviation is necessary prior to issuance of a zoning permit. If a proposed telecommunications facility is higher than 199 feet or within five (5) miles of the property boundary of either Dulles or Leesburg Airports, the applicant shall provide verification that: 1) the appropriate airport authority (Metropolitan Washington Airports Authority or the Town of Leesburg) has been notified in writing; and 2) the FAA has determined that the proposed facility is neither a hazard nor an obstruction to aviation.**

The proposed monopole will be in compliance with all regulations regarding aviation safety. Attached in the original submittal, is an FAA determination letter for the proposed structure, dated May 11, 2009. The letter states that an FAA determination of no aviation hazard has been made.

**(o) When locating on a Loudoun County or Loudoun County Sanitation Authority site or fire and/or rescue company site: 1) the telecommunications equipment shall not interfere with the existing telecommunications equipment of the primary use; and 2) the setback provisions of Section 5-618(B)(3)(e) shall not apply. In addition, the landscaping/buffering provisions of the Ordinance may be reduced or waived if the site has been developed in accordance with Section 5-1409(G).**

Not applicable.

**(p) Applicants proposing a new telecommunications monopole within one (1) mile of a County designated historic district or a Virginia Byway shall submit a minimum of three (3) visual simulations and written justification as to why the monopole could not be sited elsewhere. This requirement shall also be applied if a telecommunications monopole is proposed on a property listed on the National Register of Historic Places.**

Not located within one (1) mile of County Historic District or Virginia Byway.

**(q) Telecommunications monopoles shall not be located along ridge lines, but downslope from the top of ridge lines, to protect views of the Catoctin, Bull Run, Hogback, Short Hill, and Blue Ridge Mountains.**

Please refer to the Special Exception Plat submitted as part of this application. The proposed monopole will not be located along any ridge lines.

**(r) Applicants shall submit documentation, in written and graphic form, regarding the service area to be provided by the proposed telecommunications monopole.**

The proposed facility is necessary to cover gaps in service in the vicinity of and around portions of Route 267 and the general area surrounding the Property. As more specifically shown on the propagation maps submitted as part of this application, the wireless providers proposing to use this communications facility need additional coverage in this area.



OTHER CONSIDERATIONS RELEVANT TO THE PROPOSED FACILITY AND THE REQUESTED  
SPECIAL EXCEPTION

Consideration of Section 6-1310: Special Exception, Issues for Consideration  
**EXIT 5: BROADLAND @ CLAIBORNE PKWY / DULLES GREENWAY**

- A. The proposed use is in keeping with the County's Comprehensive Plan. Applicant has identified 3 structures that exceed 40 feet in height within a one mile radius from the proposed project, as discussed above. Two of those structures do not currently lease or license space to telecommunications carriers for the purpose of operating wireless broadband telecommunications sites. The third structure is being pursued under the CMPT/SPEX process as a potential telecommunications facility for one carrier only. This Application is for a monopole structure which is the structure type preferred by the County. The monopole will only be lit if mandated by the FAA or other governmental authorities having jurisdiction. The proposed facility adequately provides for safety from fire hazards and has effective measures of fire control for unmanned telecommunication facilities.
- B. There would be no noise emitted from the facility making no impact on the noise level of the surrounding facility.
- C. The monopole, antennae and equipment would not generate any light.
- D. The proposed use does not conflict with the existing adjacent uses as the parcels directly adjacent to the proposed site are being used primarily for commercial/industrial purposes and some residential. The proposed installation would provide private and public emergency wireless telephone coverage.
- E. The existing mature woods in the proposed location exceed the intent of the required Type 3 or 4 landscape buffer the Ordinance requires.
- F. The proposed monopole would cause no loss of topography or physical, natural, scenic, archaeological or historic feature of significance.
- G. The proposed monopole would not affect existing animal habitat, vegetation, water quality or air quality.
- H. The proposed monopole would provide benefit to, contribute to, and promote the welfare and convenience of the public by significantly improving wireless communications. The proposed monopole would enhance police, fire, and rescue services by providing additional wireless telephone and broadband coverage to the surrounding area. The monopole would also benefit the public through enhanced business and personal communications.
- I. The amount of traffic generated by the monopole is minimal and thus the existing infrastructure will adequately serve the monopole with no affect on safety to the community.
- J. The facility would be designed to meet all local and state building codes.
- K. The facility would only require electric power and telephone service, which is already available at site.
- L. The facility would have no impact on groundwater.
- M. The site would be designed to comply with the structural capacity of the soils.
- N. The proposed use would have no impact on orderly and safe road development and transportation as the site is located sufficiently distant from any existing or planned road expansion.
- O. The project would facilitate enhanced personal and business communications making Loudoun County a more desirable location to work and live.
- P. The site is designed to accommodate future wireless communication technology needs so as to support changes in agriculture, industry and business.
- Q. There is adequate off site infrastructure for the electric and land-line telephone needs of the project.
- R. The site will generate no odors.
- S. Due to the location of the site, the construction of the project will not significantly increase the affect on residents and no schools will be impacted.